

# Computer Systems Analysts (SOC 15-1121)

Computer systems analysts study an organization's current computer systems and procedures and design information systems solutions to help the organization operate more efficiently and effectively. They bring business and information technology (IT) together by understanding the needs and limitations of both.

Sample of reported job titles: Systems Analyst, Programmer Analyst, Business Systems Analyst, Computer Systems Analyst, Computer Systems Consultant, Computer Analyst, Information Systems Analyst (ISA), Applications Analyst, Business Analyst, Systems Engineer



## Job Responsibilities

- Consult with managers to determine the role of the IT system in an organization
- Research emerging technologies to decide if installing them can increase the organization's efficiency and effectiveness
- Prepare an analysis of costs and benefits so that management can decide if information systems and computing infrastructure upgrades are financially worthwhile
- Devise ways to add new functionality to existing computer systems
- Design and develop new systems by choosing and configuring hardware and software
- Oversee the installation and configuration of new systems to customize them for the organization
- Conduct testing to ensure that the systems work as expected
- Train the system's end users and write instruction manuals

## New Hampshire Outlook

- Average Hourly Wage\*: \$42.78
- Estimated Employment 2014: 2,242
- Projected Employment 2024: 2,670
- Expected 10-Year Growth: 19.1%
- Projected Average Annual Openings: 72

## Top industries in NH for this occupation:

- Insurance Carriers and Related Activities
- Computer Systems Design and Related Services
- Computer and Electronic Product Manufacturing
- Government, State (Excluding Education and Hospitals)
- Hospitals

## Education and Training

Most computer systems analysts have a bachelor's degree in a computer-related field. Because these analysts also are heavily involved in the business side of a company, it may be helpful to take business courses or major in management information systems.

Some employers prefer applicants who have a master of business administration (MBA) with a concentration in information systems. For more technically complex jobs, a master's degree in computer science may be more appropriate.

Although many computer systems analysts have technical degrees, such a degree is not always a requirement. Many analysts have liberal arts degrees and have gained programming or technical expertise elsewhere.

\* Wage estimates based on surveys conducted from November 2012 to May 2015.

Many systems analysts continue to take classes throughout their careers so that they can learn about new and innovative technologies and keep their skills competitive. Technological advances come so rapidly in the computer field that continual study is necessary to remain competitive.

Systems analysts must understand the business field they are working in. For example, a hospital may want an analyst with a background or coursework in health management, and an analyst working for a bank may need to understand finance.

**Interests (Holland Code):** ICR

- Investigative: Investigative occupations frequently involve working with ideas, and require an extensive amount of thinking. These occupations can involve searching for facts and figuring out problems mentally.
- Conventional: Conventional occupations frequently involve following set procedures and routines. These occupations can include working with data and details more than with ideas. Usually there is a clear line of authority to follow.
- Realistic: Realistic occupations frequently involve work activities that include practical, hands-on problems and solutions. They often deal with plants, animals, and real-world materials like wood, tools, and machinery. Many of the occupations require working outside, and do not involve a lot of paperwork or working closely with others.

**Career Cluster:** Information Technology

**Work Environment**

Computer systems analysts can work directly for an organization or as consultants. Consultants usually work for an information technology firm. The projects that computer systems analysts work on usually require them to collaborate and coordinate with others. Although technological advances have made telecommuting more common, many consultants still need to travel to see their clients. The length of an assignment can vary with the complexity of the job.

**Additional Information Sources\*\***

Association for Computing Machinery, <[www.acm.org](http://www.acm.org)>

IEEE, <[www.computer.org](http://www.computer.org)>

Computing Research Association, <[www.cra.org](http://www.cra.org)>

**To Find a Job**

Contact the nearest NH Employment Security office or go online to [www.nhes.nh.gov](http://www.nhes.nh.gov)

\*\* Inclusion of this information is intended to provide a convenient resource for research, but in no way constitutes an endorsement for any organization, nor is the list all-inclusive.

**Source:**

NH Employment Projections, base year 2014 to projected year 2024

Occupational Outlook Handbook, Bureau of Labor Statistics



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